

Math (Science)

Group-I

Paper

Time: 20 Minutes

(Objective Type)

Max Marks: 1

Note: Four possible answers A, B, C and D to each question are given. The choice which you think correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark for that question.

1-1- $\begin{bmatrix} \sqrt{2} & 0 \\ 0 & \sqrt{2} \end{bmatrix}$ is called _____ matrix.

- (a) Zero (b) Unit
(c) Scalar $\sqrt{}$ (d) Singular

2- $4^{2/3}$ with radical sign is _____.

- (a) $3\sqrt[3]{4^2}$ $\sqrt{}$ (b) $\sqrt[3]{4^3}$
(c) $2\sqrt[3]{4^3}$ (d) $\sqrt[3]{4^6}$

3- $\log e =$ _____, where ($e \approx 2.718$).

- (a) 0 (b) ∞
(c) 1 (d) $0.4343 \sqrt{}$

4- $(\sqrt{a} + \sqrt{b})(\sqrt{a} - \sqrt{b})$ is equal to:

- (a) $a^2 + b^2$ (b) $a^2 - b^2$
(c) $a - b \sqrt{}$ (d) $a + b$

5- The square root of $a^2 - 2a + 1$ is _____.


- (a) $\pm(a + 1)$ (b) $\pm(a - 1) \sqrt{}$
(c) $a - 1$ (d) $a + 1$

6- H.C.F of $x^2 - 5x + 6$ and $x^2 - x - 6$ is _____.

- (a) $x - 3 \sqrt{}$ (b) $x + 2$
(c) $x^2 - 4$ (d) $x - 2$

7- If x is no larger than 10, then:

- (a) $x < 10$ (b) $x > 10$
(c) $x \geq 8$ (d) $x \leq 10 \sqrt{}$

- 8- If $(x - 1, y + 1) = (0, 0)$, then (x, y) is:
 (a) $(1, -1)$ ✓ (b) $(-1, 1)$
 (c) $(1, 1)$ (d) $(-1, -1)$
- 9- Distance between the points $(0, 0)$ and $(1, 1)$ is:
 (a) 0 (b) 1
 (c) $\sqrt{2}$ ✓ (d) 2
- 10- Bisection means to divide into _____ equal parts.
 (a) 2 ✓ (b) 3
 (c) 4 (d) 5
- 11- Medians of a triangle are:
 (a) Different (b) Concurrent ✓
 (c) Equal (d) Same
- 12- The right bisectors of the sides of an acute triangle intersect each other _____ the triangle.
 (a) Inside ✓ (b) Outside
 (c) On the hypotenuse (d) On the base
- 13- A line segment has exactly _____ midpoint.
 (a) Two (b) One ✓
 (c) Three (d) Four
- 14- Area of the given  figure is:
 4 cm
 (a) 16 cm^2 ✓ (b) 8 cm
 (c) 4 cm (d) 12 cm^2
- 15- One angle on the base of an isosceles triangle is 30° . What is the measure of its vertical angle _____?
 (a) 90° (b) 30°
 (c) 60° (d) 120° ✓